

December 9, 2004

To: Commissioner for Patents P.O.Box 1450

Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572

28 Davis Avenue

Poughkeepsie, N.Y. 12603

Subject:

Serial No. 10/807,036 03/23/04

Thomas Aisenbrey

LOW COST THERMAL MANAGEMENT DEVICE OR HEAT SINK USING CONDUCTIVE PLASTICS OR CONDUCTIVE COMPOSITES

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation
In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56.

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on December (), 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

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- U.S. Patent 5,857,767 to Hochstein, "Thermal Management System for L.E.D. Arrays," discloses a method of manufacturing an electrically driven L.E.D. lamp assembly.
- U.S. Patent 6,364,009 to MacManus et al., "Cooling Devices," discloses a cooling apparatus for cooling an electrical device using a flow of coolant comprising a cooling unit.
- U.S. Patent 5,849,130 to Browne, "Method of Making and Using Thermally Conductive Joining Film," discusses a thermally conductive film that includes a film of polymeric matrix material having a thickness defined between a top surface and a bottom surface.

European Patent Application EP 0 506 509 A to Sono et al., "Semiconductor Device Having Radiation Part and Method of Producing the Same," discloses a semiconductor device having a radiation part for radiating heat and a method of producing such a semiconductor device.

International Patent Application WO 03/017365 A to Flint et al., "Thermal Transfer Devices," discusses thermal transfer devices, including heat pipes and vapor chambers.

U.S. Patent 6,397,941 to McCullough, "Net-Shape Molded Heat Exchanger," discloses a net-shape molded heat exchanger which includes a thermally conductive main body and a number of thermally conductive arms connected to and extending from the main body.

European Patent Application EP 1 265 281 A to Tobita et al., "Thermally Conductive Molded Article and Method of Making the Same," discloses a thermally conductive molded article that has excellent thermal conductivity and a method of making the same.

International Patent Application WO 95/09444 to Moore, "LED Assembly with Enhanced Power Output," discloses a light emitting diode (LED) assembly which is designed for use in a remote control and which has enhanced power output.

- U.S. Patent Application Publication US 2002/0178621 to Song et al., "Light Emitting Diode, Light Emitting Device Using the Same, and Fabrication Processes Therefor," discloses a LED which can be mounted at high density on a large area display.
- U.S. Patent Application Publication US 2002/0072137 to Ih, "Optosemiconductor Device and the Method for Its Manufacture," discloses an optosemiconductor device, improved in lightemission efficiency and heat-radiation capablilty.

- U.S. Patent Application Publication US 2001/0050441 to Shivkumar et al., "Semiconductor Multichip Module Package with Improved Thermal Performance; Reduced Size and Improved Moisture Resistance," discloses a multichip module which has a substrate, which receives several flip chip and for other semiconductor die on one surface and has vias extending through the substrate from the flip chip bottom electrodes to solder ball electrodes on the bottom of the substrate.
- U.S. Patent Application Publication US 2002/0109634 to Aisenbrey, "Low Cost Antennas Using Conductive Plastics or Conductive Composites," discusses low cost antennas formed of conductive loaded resin-based materials.

Sincerely,

Stephen B. Ackerman,

Reg. No. 37761

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Form PTO-1449 Docket Humber (Optional) 807,036 INT- 03-008 INFORMATION DISCLOSURE CITATION IN AN APPLICATION FHing Date (Use several sheets if necessary) U. S. PATENT DOCUMENTS REMINER DOCUMENT NUMBER DATE AUNG DATE F APPROPRIATE HAME BUS CLASS FOREIGN PATENT DOCUMENTS DOCUMENT NUMBER DATE COUNTRY CUSS SUBCLASS YES OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) US Patent App. Pub. US 2002/0109634 Al to Aisenbrey, Filed 02/14/02, Pub. Date 08/15/02, US C1. 343/700 MS. EXAMPLE ! DATE CONMIDERED

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